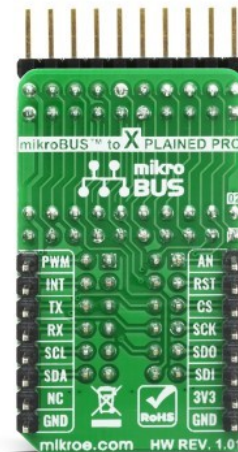


# XPRO-Adapter Click



PID: MIKROE-4123

**XPRO-Adapter Click** is an adapter board for connecting Microchip Xplained Pro expansion boards with hundreds of [mikroBUS based host boards](#). The Xplained Pro expansion header is standardized 20 pin connector which is allowing connection of many Microchip/exAtmel expansion boards. This click also has duplicated Xplained Pro and mikroBUS headers if reconfiguring is needed for individual boards or pinouts. By using XPRO-Adapter Click you can now use Microchip add-on boards on mikroBUS without additional wiring.

For more information about Microchips Xplained PRO evaluation platform and compatibility with our Click board, please visit their official [Xplained Boards page](#).

## How does it work?

The XPRO-Adapter Click enables a mikroBUS™ 18-pin connector to interface with any Xplained Pro standard 20-pin extension boards from Microchip. Main goal of this boards is to provide interface between this two sockets at the same time offering the flexibility in reconfiguring I/O pinout between this two connectors. This is enabled on extended/duplicated headers so can customize pinout by removing jumpers and using wires to remap board default pinout.

Mikroe produces entire development toolchains for all major microcontroller architectures.

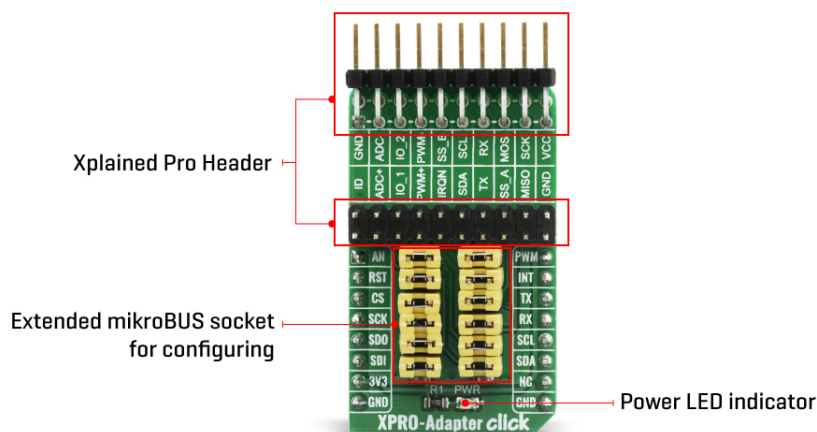
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ISO 27001: 2013 certification of informational security management system.  
ISO 14001: 2015 certification of environmental management system.  
OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).



All Xplained Pro boards have one or more dual row, 20-pin, 100mil female extension header. Note that all pins are not always connected. All connected pins follow the defined pin-out description in the table Below which you can find on the XPRO-Adapter Click silkscreen. As mentioned the extension headers can be used to connect a variety of Xplained Pro extensions to mikroBUS MCU boards or to access the pins of the target MCU on Xplained Pro MCU boards directly.

This boards supports all standard communication interfaces which you may find on expansion boards such as SPI, I2C, UART, PWM (+/-), Analog (+/-). The ID pin which serves as communication line to the ID chip on an Xplained Pro expansion boards is routed to the expanded mikroBUS connector and can be accessed and remapped if needed by using wire jumpers. The same goes for PWM lines which are available on the board however they need to be remapped to the appropriate mikroBUS pins before usage.

It is designed to be operated only with 3.3V logic levels. A proper logic voltage level conversion should be performed before the Click board™ is used with MCUs with logic levels of 5V.

## Specifications

Type	Adapter
Applications	Adapter board for connecting Microchip Xplained Pro expansion boards with hundreds of mikroBUS based host boards
On-board modules	Xplained Pro boards have one or more dual row, 20-pin, 100mil female extension header
Key Features	Support for many serial interfaces, 3.3V logic operation, remappable and configurable I/O's
Interface	Analog,GPIO,I2C,PWM,SPI,UART
ClickID	No
Compatibility	mikroBUS™
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

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## Pinout diagram

This table shows how the pinout on XPRO-Adapter Click corresponds to the pinout on the mikroBUS™ socket (the latter shown in the two middle columns).

Notes	Pin	 mikro™ BUS				Pin	Notes
Analog	<b>AN</b>	1	AN	PWM	16	<b>PWM</b>	External sync
Reset	<b>RST</b>	2	RST	INT	15	<b>INT</b>	Interrupt
SPI Chip Select	<b>CS</b>	3	CS	RX	14	<b>TX</b>	UART TX
SPI Clock	<b>SCK</b>	4	SCK	TX	13	<b>RX</b>	UART RX
SPI Data OUT	<b>SDO</b>	5	MISO	SCL	12	<b>SCL</b>	I2C Clock
SPI Data IN	<b>SDI</b>	6	MOSI	SDA	11	<b>SDA</b>	I2C Data
Power Supply	<b>3.3V</b>	7	3.3V	5V	10	NC	
Ground	<b>GND</b>	8	GND	GND	9	<b>GND</b>	Ground

## Onboard settings and indicators

Label	Name	Default	Description
LD1	PWR	-	Power LED Indicator
J2	-	-	Xplained Pro Remap Header
J3-4	-	-	Extendend mikroBUS Remap Header

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

[XPRO-Adapter click 2D and 3D files](#)

[XPRO-Adapter click schematic](#)

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